

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of : Before the Board of Appeals  
Kaoru Tsukamoto et al. : Appeal No.:  
Serial No.: 10/730,095 : Group No.: 3714  
Filed: December 9, 2003 : Examiner: K. Hu  
For: KARAOKE SERVICE METHOD AND SYSTEM BY MOBILE DEVICE

May 3, 2010

**TABLE OF CONTENTS**

I.	REAL PARTY IN INTEREST . . . . .	1
II.	RELATED APPEALS AND INTERFERENCES . . . . .	2
III.	STATUS OF THE CLAIMS . . . . .	2
IV.	STATUS OF AMENDMENTS . . . . .	2
V.	SUMMARY OF CLAIMED SUBJECT MATTER . . . . .	2
VI.	GROUND OF REJECTION TO BE REVIEWED ON APPEAL . . . . .	4
VII.	ARGUMENTS . . . . .	4
VIII.	CLAIMS . . . . .	Claims Appendix
IX.	EVIDENCE . . . . .	Evidence Appendix
X.	RELATED PROCEEDINGS . . . . .	Related Proceeding Appendix

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Kaoru Tsukamoto et al. : Appeal No.:  
Serial No.: 10/730,095 : Group No.: 3715  
Filed: December 9, 2003 : Examiner: K. Hu  
Conf. No.: 2690

For: KARAOKE SERVICE METHOD AND SYSTEM BY MOBILE DEVICE

**APPEAL BRIEF**

U.S. Patent and Trademark Office

**\*\*Via efilings\*\***

Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Date: May 3, 2010  
(Monday)

Sir:

In response to the Final Office Action dated November 2, 2009, and further responsive to the Notice of Appeal filed on March 2, 2010, this corresponding Appeal Brief is respectfully submitted.

**I. REAL PARTY IN INTEREST**

This application is assigned to Oki Semiconductor Co., Ltd., which is the real party in interest.

**II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences that may be related to, that would directly affect or be directly affected by, or have a bearing on the Board's decision in this pending appeal.

**III. STATUS OF THE CLAIMS**

Claims 1-5 and 13-19 (canceled).

Claims 6-12 and 20-25 (rejected).

Claims 6-12 and 20-25 have been finally rejected. Accordingly, the rejections of claims 6-12 and 20-25 are being appealed.

**IV. STATUS OF AMENDMENTS**

Subsequent to the Final Office Action dated November 2, 2009, Appellants submitted an Amendment Under 37 C.F.R. 1.116 dated January 28, 2010. In the Amendment dated January 28, 2010, claims 13-19 were canceled to materially reduce the issues on Appeal. No additional claim amendments were made.

In the Advisory Action dated February 12, 2010, the Examiner acknowledged that the Amendment dated January 28, 2010, would be entered for purposes of Appeal.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention relates to a system and method for realizing karaoke in a

mobile device such as a cellular phone or a personal digital assistant (PDA), that enables synchronization between applications using limited hardware resources in a limited volume.<sup>1</sup>

The mobile karaoke device as broadly featured in independent claim 6 includes in combination a memory (103 in Fig. 1) that stores karaoke contents including karaoke event data in time order and song data, the song data having synchronization data embedded therein, and the karaoke event data being representative of karaoke events (e.g., page 3, lines 9-19, page 6, lines 15-17 and Fig. 10 of the application as filed); a sound generator (102) that plays sound responsive to the song data (e.g., page 3, lines 7-8); and a multimedia processor (101) that provides the song data to said sound generator (102), and that executes karaoke events according to the karaoke event data (e.g., page 3, lines 1-4), said sound generator (102) responding to receipt of the synchronization data embedded within the song data by sending an interrupt signal to said multimedia processor (101) (e.g., page 3, lines 20-21 and page 4, lines 10-12), said multimedia processor (101) executing the karaoke events in accordance with the karaoke event data in time order in synchronization responsive to receipt of the interrupt signal (e.g., page 4, lines 13-18).

<sup>1</sup> In the description to follow, citations to various reference numerals, figures and corresponding text in the specification are provided solely to comply with Patent Office rules. It should be understood that these reference numerals, figures, and text are exemplary in nature, and not in any way limiting of the true scope of the claims. It would therefore be improper to import anything into any of the claims simply on the basis of exemplary language that is provided here only under the obligation to satisfy Patent Office rules for maintaining an Appeal.

The mobile karaoke service method as broadly featured in independent claim 20 includes in combination storing karaoke contents including karaoke event data in time order and song data in a memory (103 in Fig. 1), the song data having synchronization data embedded therein (e.g., page 3, line 9-19, page 6, lines 15-17 and Fig. 10 of the application as filed); playing sound responsive to the song data (e.g., page 3, lines 7-8) and generating an interrupt signal responsive to the synchronization data embedded within the song data, using a sound generator (102) (e.g., page 3, lines 20-21 and page 4, lines 10-12); and executing the karaoke events in accordance with the karaoke event data in time order in synchronization responsive to generation of the interrupt signal, using a multimedia processor (101) (e.g., page 4, lines 13-18).

**VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The issues on Appeal are:

- (1) The rejection of claims 20-25 under 35 U.S.C. 101, as allegedly being directed to non-statutory subject matter; and
- (2) The rejection of claims 6-12 and 20-25 under 35 U.S.C. 102(e) as being anticipated by the Naples et al. reference (U.S. Patent Application Publication No. 2002/0162445).

**VII. ARGUMENTS**

- (1) Claims 20-25 are statutory under 35 U.S.C. 101

Claims 20-25 have been rejected under 35 U.S.C. 101, as allegedly being directed to non-statutory subject matter. The Examiner has alleged that the claims are not tied to a particular machine or apparatus, and also do not transform a particular article into a different state or thing. This rejection is respectfully traversed for the following reasons.

The Examiner has attempted to apply the machine-or-transformation test as set forth in *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008). Appellants however respectfully submit that claim 20 is clearly tied to a particular machine or apparatus, and that the Examiner has misapplied the test as set forth in *In re Bilski*.

The Examiner is respectfully directed to the Memo from the Deputy Commissioner for Patent Examination Policy dated May 15, 2008 regarding Clarification of "Processes" under 35 U.S.C. § 101. As set forth therein, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus), or (2) transform underlying subject matter to a different state or thing.

As further set forth in the Memo from the Deputy Commissioner, an example of a method claim that would **not** qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should as a first alternative positively recite the other statutory class (the thing or product) to which it is tied, ***"for example by identifying the apparatus that accomplishes the method steps"***. If the claimed method is determined to be a statutory subject matter eligible

process, the inquiry proceeds to determine whether the claimed invention falls within a judicial exception (law of nature, natural phenomena, or abstract idea).

Appellants respectfully submit that the karaoke service method for a mobile device of claim 20 is clearly tied to another statutory class, that is a particular apparatus (mobile device). Claim 20 clearly recites the apparatus that accomplishes the method steps. For example, claim 20 features storing karaoke contents including karaoke event data in time order and a song data **In a memory of the mobile device.** Moreover, sound is played responsive to the song data and an interrupt signal is generated **using a sound generator of the mobile device.** Also, karaoke events are executed responsive to an interrupt signal **using a multi-media processor of the mobile device.** Thus, it should be readily understood that claim 20 clearly identifies the apparatus that accomplishes the method steps, and is thus tied to another statutory class in compliance with the guidelines set forth in the above noted Memo from the Deputy Commissioner.

On page 3, lines 7-10 of the Final Office Action dated November 2, 2009, the Examiner has alleged that the above noted features of claim 20 "do not impart meaningful limitation on the scope of the claim as it merely provides intended use of data structure, the limitation does not recite a particular machine which is critically tied to the performance of the method".

Appellants respectfully submit that the Examiner's assertion that claim 20 does not recite a particular machine which is critically tied to the performance of the method

is clearly erroneous on its face, as evidenced above. That is, as should be clear from the points emphasized above, the method is critically tied to a mobile device, in particular to the memory, sound generator and multimedia processor of the mobile device. The assertion by the Examiner that the method is not critically tied to a particular machine thus appears unreasonable and directly contrary to the above noted guidelines set forth in the Memo from the Deputy Commissioner, because claim 20 does indeed identify the apparatus that accomplishes the method steps, i.e., the mobile device.

Moreover, as noted above, the Examiner has raised the issue of "intended use of data structure". However, the Examiner has failed to identify the particular case law or guidance relied upon in raising the issue of "intended use" with respect to statutory subject matter as pertaining to method claims. "Intended use" does not appear to be mentioned as a consideration in the Memo from the Deputy Commissioner. The issue of "intended use" in this instance, without support of case law, guidance or reasonable analysis as offered by the Examiner, would thus appear irrelevant.

The Examiner has further asserted on page 3, lines 10-13 of the Final Office Action dated November 2, 2009, that claim 20 "merely uses computer componentry, but does not show that the computer performs any of the functions. The applicant is suggested to positively recite a particular machine which is critically tied to the performance of the method as supported by the specification".

However, as emphasized above, claim 20 recites a memory and a sound



generator, in addition to a multimedia processor, not merely "computer componentry" as asserted by the Examiner. It would appear that in this instance, the Examiner has improperly disregarded the memory and the sound generator, or in the least has improperly attributed the recitations thereof as "computer componentry". This assertion by the Examiner would thus appear to be clearly erroneous.

Moreover, contrary to the Examiner's assertion, the karaoke service method of claim 20 is critically tied to the mobile device by way of the memory sound generator and multimedia processor of the mobile device. It is not clear, and the Examiner has failed to explain, how the karaoke service method of claim 20 could be featured as more critically and clearly tied to the mobile device.

On page 2, lines 3-6 of the Advisory Action dated February 12, 2010, the Examiner has asserted that the basis of the rejection under 35 U.S.C. 101 is explained in the Final Office Action dated November 2, 2009. The Examiner has failed to offer any further clarifying and/or reasonable explanation. The Examiner has failed to explain why the recitation of the memory, sound generator, multimedia processor and mobile device collectively does not render the karaoke service method of claim 20 as tied to the statutory class of a thing or product. The Examiner has asserted that claim 20 "merely recites the use of a processor", without any explanation why the other features (i.e., memory, sound generator, mobile device) have been disregarded. The Examiner has failed to clearly explain why the Memo from the Deputy Commissioner has seemingly been disregarded.

Appellants respectfully submit that the karaoke service method of claim 20 is clearly tied to a mobile device. The claimed method should thus be recognized as a statutory subject matter eligible process within the guidelines as provided by *In re Bilski*. Moreover, the claimed invention clearly does not fall within a judicial exception such as a law of nature, a natural phenomena, or an abstract idea. Accordingly, Appellants respectfully submit that claims 20-25 are clearly directed to statutory subject matter and thus are in compliance with 35 U.S.C. 101, and that this rejection is improper for at least these reasons.

(2) Claims 6-12 and 20-25 distinguish over the Naples et al. reference

Claims 6-12 and 20-25 have been rejected under 35 U.S.C. 102(e) as being anticipated by the Naples et al. reference. This rejection is respectfully traversed for the following reasons.

The mobile karaoke device of claim 6 includes in combination among other features a memory "that stores karaoke contents including karaoke event data in time order and song data, the song data having synchronization data embedded therein, and the karaoke event data being representative of karaoke events"; a sound generator "that plays sound responsive to the song data"; and a multimedia processor "that provides a song data to said sound generator, and that executes karaoke events according to the karaoke event data". As further featured, the song generator responds "to receipt of the synchronization data embedded within the song data by sending an

interrupt signal to said multimedia processor, said multimedia processor executing the karaoke events in accordance with the karaoke event data in time order in synchronization responsive to receipt of the interrupt signal". Appellants respectfully submit that the Naples et al. reference as relied upon by the Examiner does not disclose these features.

On page 4, lines 11-12 of the Examiner's Answer dated November 13, 2008, the Examiner has stated that audio output subsystem 27 in Fig. 1A of the Naples et al. reference has been interpreted as the sound generator of claim 6. On page 4, lines 13-17 of the Examiner's Answer, the Examiner has stated that interactive karaoke system 10 in Fig. 1A of the Naples et al. reference has been interpreted as the multimedia processor of claim 6.

In contrast, on page 6, lines 6-7 of the following Non-Final Office Action dated March 19, 2009, the Examiner has stated that client device 12 in Fig. 5 of the Naples et al. reference has been interpreted as the sound generator of claim 6. The Examiner has further stated on page 6, lines 7-9 of the Non-Final Office Action that processor 12c (presumably as shown in Fig. 4) of the Naples et al. reference has been interpreted as the multimedia processor of claim 6.

Moreover, on page 4, lines 13-14 of the Final Office Action dated November 2, 2009, the Examiner has stated that audio output subsystem 27 of the Naples et al. reference has been interpreted as the sound generator of claim 6. The Examiner has further stated on page 4, lines 15-22 of the Final Office Action that client device 12 in

Fig. 4 of the Naples et al. reference has been interpreted as the multimedia processor of claim 6 (as opposed to being interpreted as the sound generator as in the Non-Final Office Action dated March 19, 2009).

Accordingly, during prosecution of the present application subsequent to the previous Appeal Brief filed December 6, 2007, the Examiner has interpreted audio output subsystem 27, client device 12, and then subsequently audio output subsystem 12 of the Naples et al. reference as the sound generator of claim 6 in the respective office communications. Moreover, the Examiner has interpreted interactive karaoke system 10, processor 12c and client device 12 of the Naples et al. reference as the multimedia processor of claim 6 in the respective office communications.

Accordingly, subsequent the Appeal Brief dated December 6, 2007, the Examiner has inconsistently and confusingly applied the Naples et al. reference with respect to the features of claim 6 for example. The grounds of rejection subsequent the Appeal Brief dated December 6, 2007, have been inconsistent and have materially changed throughout prosecution. Because the grounds of rejection have continuously changed during prosecution, the record with respect to this application is unclear, clear issues have not been developed prior to Appeal, and Appellants have not been afforded full and fair hearing.

Turning to the prior art, Appellants respectfully submit that the Naples et al. reference as particularly relied upon by the Examiner does not specifically disclose song data having synchronization data embedded therein.

On page 4, lines 3-12 of the Final Office Action dated November 2, 2009, the Examiner has directed attention to paragraphs 5, 48 and 49 of the Naples et al. reference as disclosing song data having synchronization data embedded therein. On page 12, lines 3-11 of the Final Office Action dated November 2, 2009, the Examiner has reproduced paragraph 5 of the Naples et al. reference in its entirety in an attempt to show that the Naples et al. reference discloses song data having synchronization data embedded therein. Appellants respectfully submit that the Examiner has misconstrued the above noted various portions of the Naples et al. reference as disclosing features that simply are not described therein.

Although not necessarily limited only thereto, song data 511 is described on page 6, lines 14-17 of the specification of the present application with respect to Fig. 10, whereby synchronization data 1001-1005 are special data strings for timing event execution embedded in the song data. For example, the data of MIDI channel 10 of note number 127 is assigned as synchronization data.

In contrast, paragraph [0005] of the Naples et al. reference as specifically relied upon by the Examiner as noted above, generally describes MIDI (musical instrument digital interface) streams and files. The Examiner has asserted on page 12, lines 14-18 of the Final Office Action dated November 2, 2009, that the sheet music of the Naples et al. reference "not only provides the notes each of the instrument is playing, but also the synchronized timing of when each of the notes is played (how the content is to be synthesized)" (our emphasis added).

However, paragraph [0005] of the Naples et al. reference does not specifically or otherwise consider or address synchronization in general, and does not even mention the words "synchronized timing". More particularly, paragraph [0005] of the Naples et al. reference does not describe or even remotely suggest song data as having specific synchronization data embedded therein.

As emphasized in the paragraph bridging pages 14-15 of the Amendment dated June 19, 2009, it is inconceivable how paragraph [0005] of the Naples et al. reference may be interpreted as explicitly or otherwise disclosing song data having synchronization data embedded therein as alleged by the Examiner. As further stated in the Amendment dated June 19, 2009, if it is the Examiner's position or understanding that such a MIDI stream as very generally described in paragraph [0005] of the Naples et al. reference inherently includes synchronization data embedded in song data, the Examiner is requested to establish a specific teaching or showing thereof, and to in addition establish how such embedded synchronization data is used in the Naples et al. reference to provide an interrupt signal. The Examiner has however failed to establish such a specific teaching or showing that a MIDI stream inherently includes synchronization data embedded in song data responsive to this request.

Paragraph [0048] of the Naples et al. reference merely discloses that the standardized performance is encoded in one or more parts that can be played back synchronously by an interactive karaoke system. Paragraph [0048] of the Naples et al. reference does not specify synchronization data, synchronization data embedded in

song data, or how synchronous playback of one or more parts is achieved. Contrary to the Examiner's assertion on page 12, line 12 through to page 13, line 4 of the Final Office Action dated November 2, 2009, the mere generalized mention of synchronous playback in paragraph [0048] of the Naples et al. reference does not "provide evidence", teach or even remotely suggest song data having synchronization data embedded therein, as would be necessary to meet the features of claim 6.

Paragraph [0049] of the Naples et al. reference merely discloses in a very general manner that a data file contains additional content such as timing cues, lyrics and other features "as will be explained". The additional content is timed as correlated to the audio content for synchronous playback. However, paragraph [0049] of the Naples et al. reference does not specifically describe synchronization data, synchronization data embedded in song data, or the manner in which the additional content is timed-correlated to audio content for synchronous playback.

On page 13, lines 13-15 of the Final Office Action dated November 2, 2009, the Examiner has asserted that paragraphs [0010], [0048] and Figs. 15A of the Naples et al. reference have previously been cited as providing the necessary teachings with respect to synchronization data and synchronization data embedded within song data.

**The Examiner has further alleged that Appellants have not addressed the features taught in these cited portions of the Naples et al. reference.**

However, contrary to the Examiner's assertion, paragraph [0010] and Fig. 15A of the Naples et al. reference were addressed in detail on page 16, line 7 through to page

17, line 20 of the previous Amendment dated June 19, 2009. Further contrary to the Examiner's assertion, paragraph [0048] of the Naples et al. reference was addressed on page 10, lines 10-21 of the Appeal Brief dated December 6, 2007.

Accordingly, contrary to the Examiner's allegation, Appellants did address paragraphs [0010] and [0048] and Fig. 15A of the Naples et al. reference. **The above noted allegation by the Examiner would thus appear to be clearly erroneous, and in effect obscures the prosecution history of this application.**

On page 13, lines 15-19 of the Final Office Action dated November 2, 2009, the Examiner has further directed attention to paragraph [0181] and Fig. 12A of the Naples et al. reference as disclosing synchronization data embedded within song data.

Paragraph [0181] of the Naples et al. reference describes cue display 82 that prompts user 16 (the person shown in Fig. 1A) for input stimuli during a live (karaoke) performance. However, reference numeral 82 is not shown in Fig. 12A or in any other figures of the Naples et al. reference. It would thus appear that "cue display 82" in Fig. 12A of the Naples et al. reference is merely a television or viewing screen that displays spikes 122 indicative of the point in time at which a user 16 is to provide an input stimulus to the virtual instrument input device 28 during a live karaoke performance.

In absence of specific clarification by the Examiner or in the Naples et al. reference, it is presumed that spikes 122 shown in Fig. 12A of the Naples et al. reference have been interpreted by the Examiner as corresponding to the timing cues generally described in paragraph [0049], and more specifically in paragraph [0181] of



the Naples et al. reference. Appellants however respectfully submit that the timing cues as generally described in paragraph [0049] of the Naples et al. reference (presumably spikes 122 in the cue display as shown in Fig. 12A), are not synchronization data embedded within song data that is stored in a memory, as would be necessary to meet the features of claim 6. Spikes 122 are merely displayed on a television screen, and are not specifically described in paragraph [0181] as synchronization data, or as embedded within song data stored in a memory. Moreover, a sound generator is not provided in the Naples et al. reference to send an interrupt signal to a multimedia processor responsive to receipt of the timing cues and/or spikes 122 in the "cue display" shown in Fig. 12A.

Appellants thus respectfully submit that the Naples et al. reference does not specifically disclose a memory that stores karaoke contents including song data having synchronization data embedded therein, as would be necessary to meet the features of claim 6. Appellants therefore respectfully submit that the mobile karaoke device of claim 6 distinguishes over the Naples et al. reference as relied upon by the Examiner, and that this rejection of claims 6-12 is improper for at least these reasons.

With further regard to this rejection, Appellants respectfully submit that the Naples et al. reference does not disclose a sound generator that plays sound responsive to song data, and that also sends an interrupt signal to a multimedia processor responsive to receipt of synchronization data embedded within song data, as would be necessary to meet the further features of claim 6.

On page 4, lines 13-14 of the Final Office Action dated November 2, 2009, the Examiner has generally stated that "(fig 1A, audio output subsystem responsive to output by the system logic)" may be interpreted as the sound generator of claim 1.

However, audio output subsystem 27 is described in paragraph [0056] of the Naples et al. reference as merely producing sound audible to user 16. Moreover, system logic 18 as presumably referred to by the Examiner above is described in paragraph [0126] of the Naples et al. reference as merely running applications. In paragraph [0129] of the Naples et al. reference, system logic 18 is described with respect to Fig. 6 as including classes that define software objects and also as including interfaces that are implemented in the classes. In paragraph [0132] of the Naples et al. reference, system logic 18 is described as including top-level objects, dynamic objects and interfaces. In paragraph [0134] of the Naples et al. reference, system logic 18 is described as including system behavior 90 which includes procedures for playing back the associated live performance in response to user input.

Appellants respectfully submit that audio output subsystem 27 and system logic 18 as shown in Fig. 1A of the Naples et al. reference as particularly relied upon by the Examiner are not specifically disclosed or described as a sound generator that generates an interrupt signal responsive to receipt of synchronization data embedded within song data stored in a memory, as would be necessary to meet the further features of claim 6.

In the first full paragraph on page 5 of the Final Office Action dated November 2,

2009, the Examiner has further directed attention to paragraphs 10, 48, 49, 57 and 164 of the Naples et al. reference as disclosing a sound generator that generates an interrupt signal responsive to receipt of synchronization data embedded within song data stored in a memory.

However, paragraph [0010] of the Naples et al. reference as specifically relied upon merely describes very generally cue data that specifies prompts coordinated with audio content of the interactive part. Again, it would appear that spikes 122 in Fig. 12A of the Naples et al. reference may be the cue data generally referred to in paragraph [0010]. However, spikes 122 in the Naples et al. reference are not interrupt signals generated in a sound generator responsive to synchronization data embedded within song data and also are not sent to a multimedia processor, as would be necessary to meet the features of claim 6. Spikes 122 of the Naples et al. reference are merely prompts for the user to input stimuli during a live karaoke performance.

Paragraph [0048] of the Naples et al. reference as specifically relied upon by the Examiner merely describes in general that one or more parts can be played back synchronously by an interactive karaoke system.

Paragraph [0049] of the Naples et al. reference as specifically relied upon by the Examiner merely describes that a data file contains additional content such as timing cues, and that the additional content is timed as correlated to audio content for synchronous playback.

Paragraph [0057] of the Naples et al. reference as specifically relied upon by the

Examiner merely describes in general system logic 18 as including a player application and an engine library.

Paragraph [0164] of the Naples et al. reference as specifically relied upon by the Examiner merely describes live interactive playback processes that instruct performance objects.

Appellants respectfully submit that the above noted paragraphs of the Naples et al. reference as particularly relied upon by the Examiner do not specifically describe a sound generator that generates an interrupt signal responsive to receipt of synchronization data embedded within song data stored in a memory, whereby the interrupt signal is sent to a multimedia processor, as would be necessary to meet the features of claim 6. Although a variety of paragraphs are cited by the Examiner, the Examiner has failed to specifically and clearly identify in the Naples et al. reference an interrupt signal, and more particularly an interrupt signal generated responsive to synchronization data embedded within song data, as would be necessary to meet the features of claim 6.

As described on page 4, lines 17-21 of the specification of the present application, the multimedia processor can control event timing according to the interruptions that occur responsive to the synchronization data embedded in the song data. As a result, the multimedia processor has no need to manage time and has no need to control a timer for synchronizing between display of characters and/or pictures and the music. The load of the system on the multimedia processor of the mobile

karaoke device such as in claim 6 is thus reduced. The Naples et al. reference as relied upon by the Examiner does not disclose or suggest such concepts.

Appellants thus respectfully submit that the mobile karaoke device of claim 6 distinguishes over the Naples et al. reference as relied upon by the Examiner, and that this rejection of claims 6-12 is improper for at least these additional reasons.

Appellants also respectfully submit that the karaoke service method for a mobile device of claim 20 distinguishes over the Naples et al. reference as relied upon by the Examiner for at least somewhat similar reasons as set forth above with respect to claim 6.

The Naples et al. reference does not disclose a karaoke service method for a mobile device as including storing song data having synchronization data embedded therein in a memory, generating an interrupt signal responsive to the synchronization data embedded within the song data using a sound generator, and executing karaoke events in synchronization responsive to the generated interrupt signal using a multimedia processor. Appellants thus respectfully submit that the karaoke service method of claim 20 distinguishes over the Naples et al. reference as relied upon by the Examiner, and that this rejection of claims 20-25 is improper for at least these reasons.

### Conclusion

Appellants respectfully submit that claims 20-25 are in compliance with 35 U.S.C. 101, and that claims 6-12 and 20-25 distinguish over the prior art as relied upon

by the Examiner, for at least the above reasons. Appellants therefore respectfully request that the final rejection of claims 6-12 and 20-25 be withdrawn, and that these corresponding claims be passed to issue.

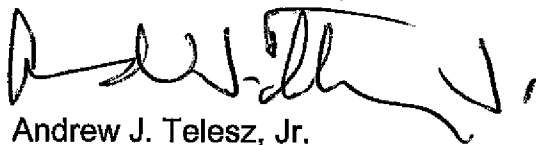
In the event that there are any outstanding matters remaining in the present application, please contact Andrew J. Telesz, Jr. (Reg. No. 33,581) at (571) 283-0720 in the Washington, D.C. area, to discuss these matters.

The required fee of \$500.00 under 37 C.F.R. 41.20 for filing this Appeal Brief should be charged to Deposit Account No. 50-0238.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment for any additional fees that may be required under 37 C.F.R. 41.20 or 37 C.F.R. 1.17 and 1.136(a), or credit any overpayment, to Deposit Account No. 50-0238.

Respectfully submitted,

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**Appendix - Claims on Appeal**

6. A mobile karaoke device comprising:

a memory that stores karaoke contents including karaoke event data in time order and song data, the song data having synchronization data embedded therein;

a sound generator that plays sound responsive to the song data; and

a multimedia processor that provides the song data to said sound generator, and that executes karaoke events according to the karaoke event data,

said sound generator responding to receipt of the synchronization data embedded within the song data by sending an interrupt signal to said multimedia processor, said multimedia processor executing the karaoke events in time order in synchronization responsive to receipt of the interrupt signal.

7. The mobile karaoke device of claim 6, wherein said memory stores the karaoke event data into groups which are each time ordered.

8. The mobile karaoke device of claim 6, wherein said multimedia processor divides the karaoke event data into a number of event zones by executing a reset event.

9. The mobile karaoke device of claim 6, wherein said memory stores text data as the karaoke event data, the text data representative of text to be displayed by the mobile karaoke device.

10. The mobile karaoke device of claim 6, wherein said memory stores picture data as the karaoke event data, the picture data representative of a picture to be displayed by the mobile karaoke device.

11. The mobile karaoke device of claim 6, wherein said memory stores video data as the karaoke event data, the video data representative of video to be played by the mobile karaoke device.

12. The mobile karaoke device of claim 6, wherein said memory stores audio data as the karaoke event data, the audio data representative of audio to be played by the mobile karaoke device.

20. A karaoke service method for a mobile device comprising:

storing karaoke contents including karaoke event data in time order and song data in a memory, the song data having synchronization data embedded therein, and the karaoke event data being representative of karaoke events;

playing sound responsive to the song data and generating an interrupt signal responsive to the synchronization data embedded within the song data, using a sound generator; and

executing the karaoke events in accordance with the karaoke event data in time order in synchronization responsive to generation of the interrupt signal, using a multimedia processor.

21. The karaoke service method of claim 20, wherein the karaoke event data is in groups which are each time ordered.

22. The karaoke service method of claim 20, wherein the karaoke event data is text data representative of text to be displayed.



23. The karaoke service method of claim 20, wherein the karaoke event data is picture data representative of a picture to be displayed.
24. The karaoke service method of claim 20, wherein the karaoke event data is video data representative of video to be played.
25. The karaoke service method of claim 20, wherein the karaoke event data is audio data representative of audio to be played.

**Evidence Appendix**

No evidence has been submitted under 37 C.F.R. 1.130, 1.131, or 1.132, or entered by the Examiner in connection with this pending Appeal. Thus, there are **no** copies of evidence included in this Appendix.

**Related Proceedings Appendix**

There are no Appeals or Interferences that may be related to, directly affect, or be directly affected by or have a bearing on the Decision by the Board in this pending Appeal. Thus, there are no copies of decisions included in this Appendix.